Chuckwalla Chatter

The Desert Outdoor Center Maricopa County



Volume 6, Issue 1

DOC Cools Off With the Sun by Rich Glinski

In response to our goal to reduce energy costs at the DOC, Arizona Public Service Company conducted energy use and engineering studies. As a result of their findings, they arranged for installation of a Solar Thermal Heating Ventilating and Cooling (HVAC) unit on the main building of the DOC.

The unit will rely on solar power to augment energy needs it draws from conventional power lines. APS selected S.O.L.I.D. USA, Inc. to provide and install the state of the art system, the first of its kind in Arizona.

The 20-ton unit uses 16 solar collectors, each about 112 square-feet in size, to heat water that is stored in a 1000-gallon tank, to heat the facility in winter, and power an absorption chiller to cool



Various Solar Thermal Heating/Cooling units have been installed worldwide by S.O.L.I.D.

the 14,000 square-foot complex during the long, hot summer months.

Installation will be complete by the end of March. Annual utility bills for the Center have averaged about \$40,000. This new system will afford a 40-70% energy savings for the main building as well as reduce CO_2 emissions.

The unit will be dedicated officially on April 18. An open house for the general public to view the system and other new installations at the DOC will be held on April 22.

Follow the Signs by Terri Martzke

You will be able to find your way around easier on your next visit to the DOC. Thanks to funding by APS, the Center has been outfitted with new interpretive and passive education signs throughout the grounds. The signs will be made of a faux granite and will display the familiar rock art lizard design found by our front entrance.

Many of the new signs will enhance or focus on details about our most asked about sites such as the ethnobotany garden, the excavation and paleo pits, and the weather station. Directional signs will help guide visitors around the facility, while other signs will provide passive education for features such as our solar panels or raptor perches.

Inside this issue: Word from the Park Supervisor 2 What's in the Lake? 2 The Force is With Us 2 It's the Pits Out Here 3 Ethnobotany Garden Completed 4 "Chatter Bits" 4

A Word from the Park Supervisor

Prior to last year, Aprils were a real busy time at the DOC, but they held the promise of a slow down in May, and a drastic tapering off in June through August since school was out. All that changed last spring since our partnership with the Boy Scouts of America has led to the development of an Aquatics Education Program. Now we're jamming all the way through the month of August!

Last June about 232 boys attended this summer camp, earning hundreds of merit badges in everything from canoeing to sailing and

taking advantage of recreational opportunities that lead to healthier lifestyles. This year we are expanding the program to the entire months of June and July. By the middle of May we will have a permanent boat dock in Honeymoon Cove to house the watercraft and perform instruction.

So, between installation of the solar thermal HVAC system (see Story, page 1) and the construction of the boat dock, this spring is humming along. And amidst it all will be thousands of kids receiving a top notch outdoor educational experi-

ence from the County's finest Interpretive Rangers...who will be looking forward to Boy Scouts in June and July...and then a relatively relaxing August!

- Rich Glinski Park Supervisor

What's in the Lake? By Amy Ford

One of the DOC's most popular

classes is "Cast-away Kids," a class that teaches kids about the hobby of freshwater fishing and all about fishing etiquette. But in class the students never got to see a single live lake fish ... until now.

This fall, a huge aquarium setup was donated to the DOC for a live

fish display in our exhibit hall. It consists of two



tanks. Bluegill, channel catfish,

and even juvenile largemouth bass will swim in the upper 125 gallon "lake," while the bottom aquarium represents a desert riparian habitat, and is home to two leopard frogs named *Google* and *Yahoo*.

Arizona Game and Fish generously donated fish from their Sedona hatchery so that visitors can see 'what's in the lake' without ever having to cast a line. The critters that live in this display will be great 'live action' additions to the

classes "Cast-away Kids" and "In Cold Blood."

Many thanks to maintenance staff David and Marc for hours of sanding, painting and tank scrubbing the new display for our exhibit hall.



The Force is With US by Terri Martzke

The Force is present in the Exhibit Hall. 'Darth Vader,' the Emperor Scorpion, is one of the newest additions to our recently installed Arach-

nid display.

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A native to West Africa, Darth has quickly become a favorite among visitors. His size and shiny black exoskeleton make him quite impressive. He's even more fascinating when shone upon with a black light making him glow green.

Although Darth may look deadly, his sting is relatively weak compared to his smaller cousin, the bark scorpion, with the strength similar to that of a bee sting. Be sure to visit him and the other scorpions and spiders in our Exhibit Hall.

Did you know?

Scorpions are one of the oldest life forms on the planet, having existed as a group for over 400 million years!

Page 2 Chuckwalla Chatter

It's the Pits Out Here!

Rockin' the Pit by Terri Martzke

What has 48 legs, lots of muscle, and can move tons of rocks and granite within a few hours? The answer is Dianna Bonney's Sixth Grade Class from Mountain View Elementary. And thanks to them, the long awaited ar-



chaeological excavation site at the DOC was completed.

When asked to consult on the construction of the pit,

Bonney was eager to not only give her expertise, but provide muscle as well. Mountain View currently has their own arch pit in use, built by and maintained by their Sixth Graders.

"I want to teach my students that no matter who you are or what your background is, you always have something to contribute to the bigger community," she says.

Aside from some pinched fingers and close encounters with cholla, the kids' enthusiasm and energy remained high as they hauled rocks from the defunct tortoise enclosure to the new site where the challenge course use to be.



Bonney explains, "They like contributing – knowing that what they are doing is real, and not just school work."

After

building walls and shoveling in crushed granite, the students seeded the completed pit with artifacts they had made themselves — Hohokam style fired pottery, bow drills, and stone tools. In addition, Bonney also donated hand shovels, stakes, twine and additional artifacts to help the arch pit get off to a good start.

Under her instruction, these eleven



and twelve year olds have installed xeriscapes, footpaths, and bridges as well as gardens and ramadas on

their own school grounds. In late January, they brought their knowledge and tools to the DOC to complete the arch pit project they were proud to build for other students to use.

For those visiting students taking Archaeology, archaeological excavation will now be offered as the sequel to the course providing hands-on experience in this mock dig site. The pit is designed to replicate the ruins of a Hohokam coursed adobe house, circa 1450



Digging up Dinos by Natalie Harper

The chances of a child discovering dinosaur fossils are few and far between, but children will have an amazing opportunity to become paleontologists and dig up *real* fossils at our soon-to-be-constructed Paleontology Pit.

As an extension to the currently offered Day of the Dinosaur class, 'Dino Detectives' will teach kids hands-on step-by-step excavation techniques.

In the pit, children will unearth replica dinosaur bones, tracks, nests, and many other fossilized creatures that lived long ago. They will get to use a variety of field tools such as chisels, trowels, sieves, brushes, and safety equipment.

The activities and skills taught in Dino Detectives will offer children a truly unique experience, whether the class is taken alone or as a sequel to our Day of the Dino class. So keep a lookout for dinosaurs coming soon to the DOC!

Leave Only Footprints by John Capes

A tracking pit area is currently being developed at the DOC. It will be used to enhance our tracking class and to better understand the local animals. The pit will be baited to attract curious creatures. Students and guests will be able to share in the process of identifying the tracks left behind.

Although the exact location has yet to be determined, different types of soils and materials are being tested to see which will provide well defined tracks. A biodegradable calcium carbonate surface has been shown to work very well. This white powdery substance makes for a clear print and can reveal some secrets about an animal including size, weight, and walking pattern.

In addition to using the pit as a teaching tool, the interpretive rangers will be collecting data from it to study local wildlife behaviors and populations. Some tracks we expect to identify are those of coyote, mule deer, javelina, bobcat and hopefully, the elusive mountain lion which has had rumored sightings in the area.



Volume 6, Issue 1 Page 3

Ethnobotany Garden Completed

by Adam Melle

Things are sprouting up at the Sonoran Ethnobotanical Garden. The first crop was planted in the agricultural section and will be harvested in late spring. The garden was also recently funded for phase II - "the signage phase" - through an APS grant.

To be installed by late April, the interpretive signs will indicate the following features of the garden: Native American Canal Agriculture depicting how native inhabitants first used irrigation methods in the desert to grow crops such as corn, gourds, purslane, cotton and squash; a story board defining 'What is Ethnobotany'; and a detailed garden key describing the uses of each plant. Signs will also be posted at the base of each plant displaying its common name, scientific name and cultural use.

Visiting teachers will be able to view the garden for ideas on how they and their students can construct one at their school for educational purposes. In addition, a new class on Ethnobotany that compliments the garden will also be offered soon.







Local artist, Ann Margot Osgood, provided the artwork that will be seen on the interpretive signs in the newly completed Ethnobotany Garden

"Chatter Bits"

New Classes offered for 2006:

Venemous Creatures focuses on the many varied deadly creepy crawlies found right here in the Sonoran Desert.

The Amazing Race is an evening program offering a mix of physical and mental challenges that improve cooperation, organization and communication skills.

Dream Catchers is a fee based evening activity where visitors can create their very own dream catcher, based on the Native American craft.

Planning a Visit to the DOC?

Look for our **FAQ's** to find the answers to the most commonly asked questions in planning a visit to the DOC. It can be found on our website:

www.maricopa.gov/parks/doc.

Look to the Stars

For more information on the Stargazing schedule for this spring at the DOC contact Tony & Carole La Conte at 623-979-1393 or visit:

www.stargazingforeveryone.com

The Desert Outdoor Center at Lake Pleasant (DOC) is dedicated to providing an interactive educational experience in a distinctive facility staffed by experienced educators. It provides learners an opportunity to become immersed in an inspirational setting that instills a respect for the natural environment.

Chuckwalla Chatter is a semiannual newsletter published in the spring and fall. Look for our next newsletter in October.

Editor: Terri Martzke

The Desert Outdoor Center Maricopa County

41402 N. 87th Avenue Peoria, AZ 85383

Phone: 602-372-7470 Fax: 602-372-7475 www.maricopa.gov/parks/doc

